

WHAT IS CLAIMED IS:

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1. An image editing apparatus comprising:
  - input means for inputting image data consisting of shape data and texture data;
  - 5 separation means for separating the image data into the shape data and texture data;
  - shape manipulation means for manipulating the shape data separated from the image data by said separation means; and
  - 10 texture manipulation means for manipulating the texture data in conformity with result of manipulation by said shape manipulation means after processing by said shape manipulation means ends.
- 15 2. The apparatus according to claim 1, further comprising display means for displaying shape data that has been manipulated by said shape manipulation means.
- 20 3. The apparatus according to claim 1, further comprising display means for displaying an image based upon shape data that has been manipulated by said shape manipulation means and texture data that has been manipulated by said texture manipulation means.
- 25 4. The apparatus according to claim 1, wherein shape data and texture data constituting the image data input

by said input means have been encoded, and said separation means further includes decoding means for decoding the encoded shape data and texture data.

5 5. The apparatus according to claim 1, wherein the image data input by said input means is image data representing one object of a plurality of objects constituting one screen.

10 6. The apparatus according to claim 1, further comprising encoding means for encoding shape data that has been manipulated by said shape manipulation means and texture data that has been manipulated by said texture manipulation means.

15 7. An image editing apparatus for editing object image data consisting of shape data and texture data, comprising:  
first manipulation means for manipulating shape data based upon a user operation;

20 first display means for presenting a display of the shape data that reflects the manipulation performed by said first manipulation means; and  
second manipulation means responsive to a predetermined operation, which is not accompanied by manipulation of shape data, for manipulating

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corresponding texture data in conformity with the manipulation of this shape data.

8. The apparatus according to claim 7, further  
5 comprising second display means for displaying an image based upon shape data that has been manipulated by said first manipulation means and texture data that has been manipulated by said second manipulation means.

10 9. The apparatus according to claim 7, wherein the predetermined operation associated with said second manipulation means is a command for ending an operation for editing the shape data by said first manipulation means.

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10. The apparatus according to claim 7, wherein the predetermined operation associated with said second manipulation means is an operation for switching a shape to be subjected to manipulation by said first manipulation means.

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11. The apparatus according to claim 7, further comprising extraction means for extracting shape data and texture data from object image data and supplying 25 the shape data and texture data to said first and second manipulation means.

12. The apparatus according to claim 7, further comprising selection means for selecting one desired item of object image data if a plurality of items of object image data exist;

5       wherein said extraction means extracts shape data and texture data from object image data that has been selected by said selection means.

13. An image editing apparatus comprising:

10       read-out means for reading a bit stream, which has been compressed and encoded, out of a storage device; separation means for separating the bit stream, which has been read out by said read-out means, into at least a bit stream of shape information and a bit stream 15 of texture information on a per-object basis;

decoding means for decoding, object by object, each bit stream obtained by separation by said separation means, thereby generating shape data and texture data;

20       manipulation means for manipulating the shape data, which has been obtained by said decoding means, based upon a manipulation command from a user;

25       altering means responsive to a predetermined command operation, which is not accompanied by manipulation of shape data, for altering the texture data in conformity with the manipulation of the shape data by said manipulation means;

re-encoding means for re-encoding the shape data that has been manipulated by said manipulation means and the texture data that has been altered by said altering means; and

5 write means for comparing a bit stream that has been re-encoded by said re-encoding means and the bit stream that has been obtained by said separation means, updating bit streams of portions that have been altered and writing the result to the storage device.

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14. An image editing method comprising:

an input step of inputting image data consisting of shape data and texture data;

15 the shape data and texture data;

a shape manipulation step of manipulating the shape data separated from the image data at said separation step; and

20 a texture manipulation step of manipulating the texture data in conformity with result of manipulation at said shape manipulation step after processing at said shape manipulation step ends.

25 15. The method according to claim 14, further comprising a display step of displaying shape data that has been manipulated at said shape manipulation step.

16. The method according to claim 14, further comprising a display step of displaying an image based upon shape data that has been manipulated at said shape manipulation step and texture data that has been 5 manipulated at said texture manipulation step.

17. The method according to claim 14, wherein shape data and texture data constituting the image data input at said input step have been encoded, and said 10 separation step further includes a decoding step of decoding the encoded shape data and texture data.

18. The method according to claim 14, wherein the image data input at said input step is image data representing 15 one object of a plurality of objects constituting one screen.

19. The method according to claim 14, further comprising an encoding step of encoding shape data that 20 has been manipulated at said shape manipulation step and texture data that has been manipulated at said texture manipulation step.

20. An image editing method for editing object image 25 data consisting of shape data and texture data, comprising:

a first manipulation step of manipulating shape data based upon a user operation;

a first display step of presenting a display of the shape data that reflects the manipulation performed at 5 said first manipulation step; and

a second manipulation step responsive to a predetermined operation, which is not accompanied by manipulation of shape data, of manipulating corresponding texture data in conformity with the 10 manipulation of this shape data.

21. The method according to claim 20, further comprising a second display step of displaying an image based upon shape data that has been manipulated at said 15 first manipulation step and texture data that has been manipulated at said second manipulation step.

22. The method according to claim 20, wherein the predetermined operation associated with said second 20 manipulation step is a command for ending an operation for editing the shape data at said first manipulation step.

23. The method according to claim 20, wherein the 25 predetermined operation associated with said second manipulation step is an operation for switching a shape

to be subjected to manipulation at said first manipulation step.

24. The method according to claim 20, further  
5 comprising an extraction step of extracting shape data and texture data from object image data and supplying the shape data and texture data to said first and second manipulation steps.

10 25. The method according to claim 20, further comprising a selection step of selecting one desired item of object image data if a plurality of items of object image data exist;

15 wherein said extraction step extracts shape data and texture data from object image data that has been selected at said selection step.

26. An image editing method comprising:  
a read-out step of reading a bit stream, which has  
20 been compressed and encoded, out of a storage device;  
a separation step of separating the bit stream, which has been read out at said read-out step, into at least a bit stream of shape information and a bit stream of texture information on a per-object basis;

a decoding step of decoding, object by object, each bit stream obtained by separation at said separation step, thereby generating shape data and texture data;

5 a manipulation step of manipulating the shape data, which has been obtained at said decoding step, based upon a manipulation command from a user;

10 an altering step responsive to a predetermined command operation, which is not accompanied by manipulation of shape data, for altering the texture data in conformity with the manipulation of the shape data at said manipulation step;

15 a re-encoding step of re-encoding the shape data that has been manipulated at said manipulation step and the texture data that has been altered at said altering step; and

20 a write step of comparing a bit stream that has been re-encoded at said re-encoding step and the bit stream that has been obtained at said separation step, updating bit streams of portions that have been altered and writing the result to the storage device.

27. A storage medium storing a control program for causing a computer to execute image editing, said control program comprising:

25 code of an input step of inputting image data consisting of shape data and texture data;

code of a separation step of separating the image data into the shape data and texture data;

code of a shape manipulation step of manipulating the shape data separated from the image data at said 5 separation step; and

code of a texture manipulation step of manipulating the texture data in conformity with result of manipulation at said shape manipulation step after processing at said shape manipulation step ends.

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28. A storage medium storing a control program for causing a computer to execute image editing processing for editing object image data consisting of shape data and texture data, said control program comprising:

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code of a first manipulation step of manipulating shape data based upon a user operation;

code of a first display step of presenting a display of the shape data that reflects the manipulation performed at said first manipulation step; and

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code of a second manipulation step responsive to a predetermined operation, which is not accompanied by manipulation of shape data, of manipulating corresponding texture data in conformity with the manipulation of this shape data.

29. A storage medium storing a control program for causing a computer to execute image editing, said control program comprising:

code of a read-out step of reading a bit stream,  
5 which has been compressed and encoded, out of a storage device;

code of a separation step of separating the bit stream, which has been read out at said read-out step, into at least a bit stream of shape information and a  
10 bit stream of texture information on a per-object basis;

code of a decoding step of decoding, object by object, each bit stream obtained by separation at said separation step, thereby generating shape data and texture data;

15 code of a manipulation step of manipulating the shape data, which has been obtained at said decoding step, based upon a manipulation command from a user;

code of an altering step responsive to a predetermined command operation, which is not  
20 accompanied by manipulation of shape data, for altering the texture data in conformity with the manipulation of the shape data at said manipulation step;

code of a re-encoding step of re-encoding the shape data that has been manipulated at said manipulation step  
25 and the texture data that has been altered at said altering step; and

code of a write step of comparing a bit stream that  
has been re-encoded at said re-encoding step and the bit  
stream that has been obtained at said separation step,  
updating bit streams of portions that have been altered  
5 and writing the result to the storage device.